

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐  
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
2. NAME OF OPERATOR: ConocoPhillips Company		8. UNIT or CA AGREEMENT NAME: N/A	
3. ADDRESS OF OPERATOR: P.O. Box 51810 CITY Midland STATE Tx ZIP 79710		PHONE NUMBER: (432) 688-6943	9. WELL NAME and NUMBER: Cassia 28-862
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2656.59 FNL & 1868.68 FWL AT PROPOSED PRODUCING ZONE:		10. FIELD AND POOL, OR WILDCAT: Drunkards Wash	
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 28 14S 10E		12. COUNTY: Carbon	
13. STATE: UTAH		14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 1 mile south of Price, Utah	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) ~360'	16. NUMBER OF ACRES IN LEASE: 160	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1500' +/-	19. PROPOSED DEPTH: 1,600	20. BOND DESCRIPTION: Statewide	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5521 GR	22. APPROXIMATE DATE WORK WILL START: 10/1/2007	23. ESTIMATED DURATION: 30 days	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
17 1/2	13 3/8" H40 40.5#	60	
11	8 5/8" J55 24#	400	185 sxs G + 2% CC .25 pps D130 15.8 ppg 1.16 ft3/sk
7 7/8"	5 1/2 M80 15.5#	1,600	285 sxs 50/50 G + 2% gel + .1defo 14.1 ppg

25. ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |   |  |
|---|--|
| <input type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER     | <input type="checkbox"/> COMPLETE DRILLING PLAN  |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) Donna Williams TITLE Sr. Regulatory Specialist  
SIGNATURE DATE 9/10/2007

(This space for State use only)

API NUMBER ASSIGNED: 43-007-31330

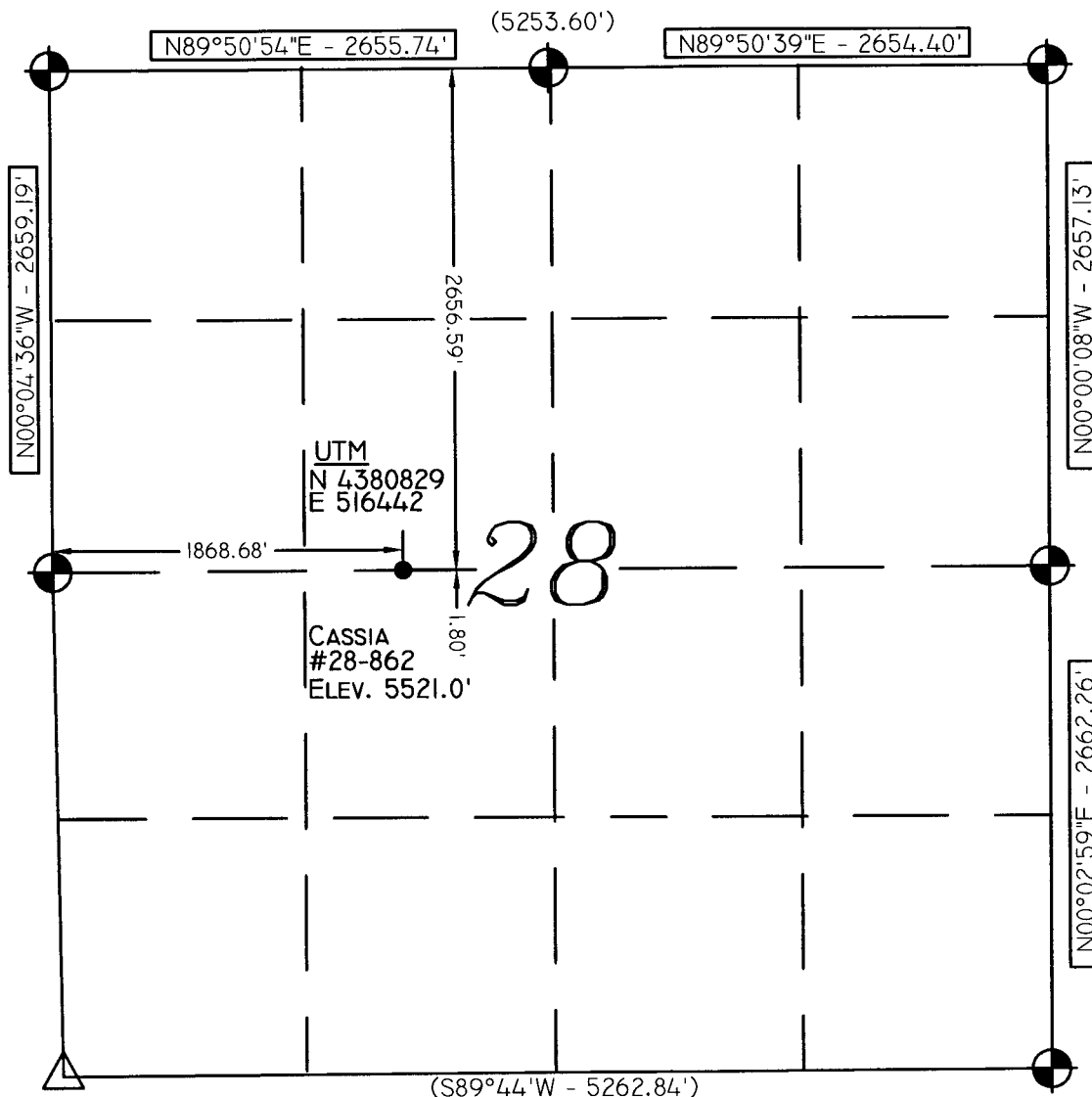
APPROVAL:

RECEIVED  
SEP 12 2007

DIV. OF OIL, GAS & MINING

# Range 10 East

Township 14 South



## Location:

The well location was determined using a Trimble 5700 GPS survey grade unit.

## Basis of Bearing:

The Basis of Bearing is GPS Measured.

## GLO Bearing:

The Bearings indicated are per the recorded plat obtained from the U.S. Land Office.

## Basis of Elevation:

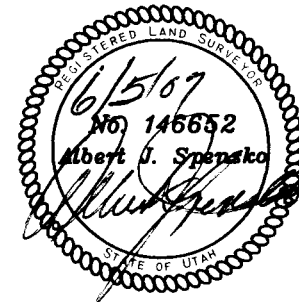
Basis of Elevation of 5459' being at the Southeast Section Corner of Section 34, Township 14 South, Range 10 East, Salt Lake Base and Meridian, as shown on the Price Quadrangle 7.5 minute series map.

## Description of Location:

Proposed Drill Hole located in the SE/4 NW/4 of Section 28, T14S, R10E, S.L.B.&M., being North 1.80' from Quarter Section Line and East 1868.68' from West Line of Section 28, T14S, R10E Salt Lake Base & Meridian.

## Surveyor's Certificate:

I, Albert J. Spensko, a Registered Professional Land Surveyor, holding Certificate 146652 State of Utah, do hereby certify that the information on this drawing is a true and accurate survey based on data of record and was conducted under my personal direction and supervision as shown hereon.



**TALON RESOURCES, INC.**

615 North 400 East P.O. Box 1230

Huntington, Utah 84528

Phone (435)687-5310 Fax (435)687-5311

E-Mail talon@ctr.net

**ConocoPhillips Company**

**WELL CASSIA #28-862**

Section 28, T14S, R10E, S.L.B.&M.

Carbon County, Utah

Drawn By:  
N. BUTKOVICH

Checked By:  
L.W.J./A.J.S.

Drawing No.  
**A-1**

Date:  
6/1/07  
Scale:  
1" = 1000'

Sheet 1 of 4

Job No.  
2854

## Legend

- Drill Hole Location
- ⊙ Metal Cap (Found)
- Brass Cap (Searched for, but not found)
- △ Calculated Corner
- ( ) GLO

GPS Measured

## NOTES:

1. UTM and Latitude / Longitude Coordinates are derived using a GPS Pathfinder and are shown in NAD 27 Datum.

LAT / LONG  
39°34'44.032"N  
110°48'30.801"W

**GRAPHIC SCALE**  
0 500' 1000'  
( IN FEET )  
1 inch = 1000 ft.



ConocoPhillips Company  
3300 N. 'A' St. Bldg. 6  
Midland, TX 79705

November 12, 2007

Utah Division of Oil, Gas, and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114

Location Exception Request  
Cassia 28-862  
2332.01 FNL & 2007.12 FWL  
SENW of 28-14S-10E  
Carbon County, Utah

Ladies and Gentlemen:

Pursuant to Utah Code R649-3-2, ConocoPhillips Company hereby respectfully requests administrative approval for a location exception for the referenced well due to topography issues that prevented the well from being spotted within the center of the 40 acre spacing unit. Furthermore, COP is 100% owner/operator of all tracts within a radius of 460' from the proposed well.

Should you have any questions, or need additional information, please do not hesitate to contact me at 432-688-6943.

Sincerely,



Donna J. Williams  
Sr. Regulatory Specialist

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☒  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: <b>Fee</b>		6. SURFACE: <b>Fee</b>	
1A. TYPE OF WORK:    DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>N/A</b>			
B. TYPE OF WELL:    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: <b>N/A</b>			
2. NAME OF OPERATOR: <b>ConocoPhillips Company</b>				9. WELL NAME and NUMBER: <b>Cassia 28-862</b>			
3. ADDRESS OF OPERATOR: <b>P.O. Box 51810</b> CITY <b>Midland</b> STATE <b>Tx</b> ZIP <b>79710</b>				PHONE NUMBER: <b>(432) 688-6943</b>			
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: <b>2332.01 FNL &amp; 2007.12 FWL</b> AT PROPOSED PRODUCING ZONE:  <b>516487x    -110.808024</b> <b>4380930Y</b> <b>39.579803</b>				10. FIELD AND POOL, OR WILDCAT: <b>Drunkards Wash</b>			
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>Approximately 1 mile south of Price, Utah</b>				12. COUNTY: <b>Carbon</b>		13. STATE: <b>UTAH</b>	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): <b>+/- 500'</b>		16. NUMBER OF ACRES IN LEASE: <b>160</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40</b>			
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1500 +/-</b>		19. PROPOSED DEPTH: <b>1,600</b>		20. BOND DESCRIPTION: <b>Statewide</b>			
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>5514.9</b>		22. APPROXIMATE DATE WORK WILL START: <b>11/15/2007</b>		23. ESTIMATED DURATION: <b>30 days</b>			

24. PROPOSED CASING AND CEMENTING PROGRAM							
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
17 1/2"	13 3/8"	H40	40.5#	60			
11"	8 5/8"	J55	24#	400	185 sxs G + 2% CC	.25 pps D130	15.8 ppg    1.16 ft3/sk
7 7/8"	5 1/2"	M80	15.5#	1,600	285 sxs 50/50 G + 2% gel + .1 defo	14.1 ppg	1.67 ft3/sk

25. ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Donna Williams    TITLE Sr. Regulatory Specialist

SIGNATURE [Signature]    DATE 11/12/2007

(This space for State use only)

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

API NUMBER ASSIGNED: 43007-31330

APPROVAL:

Date: 12-06-07  
By: [Signature]  
(See Instructions on Reverse Side)

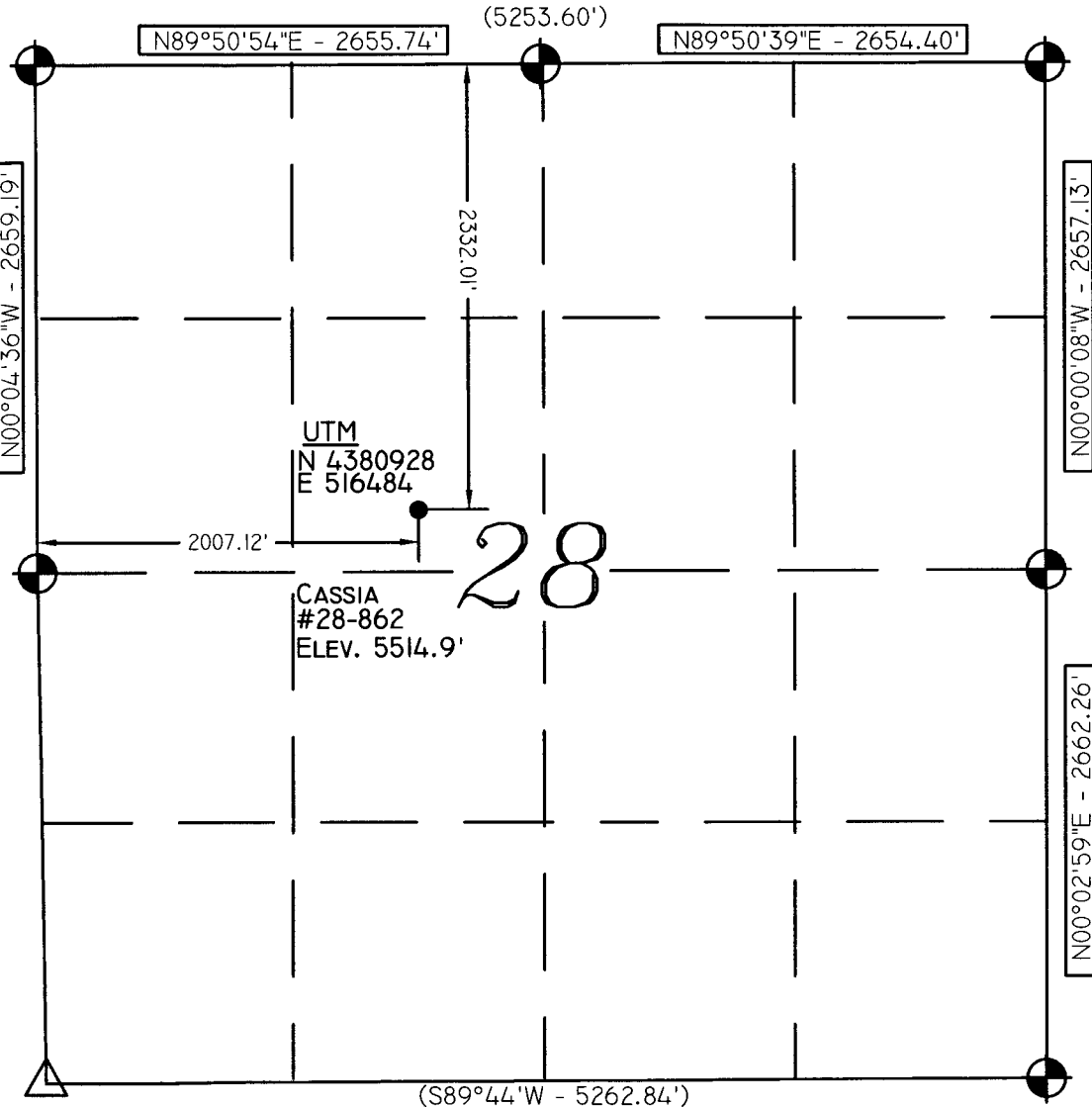
**RECEIVED**

**NOV 13 2007**

DIV. OF OIL, GAS & MINING

# Range 10 East

Township 14 South



## Legend

- Drill Hole Location
- ⊙ Metal Cap (Found)
- Brass Cap (Searched for, but not found)
- △ Calculated Corner
- ( ) GLO
- GPS Measured

## NOTES:

1. UTM and Latitude / Longitude Coordinates are derived using a GPS Pathfinder and are shown in NAD 27 Datum.

LAT / LONG  
39°34'47.240"N  
110°48'29.031"W

## Location:

The well location was determined using a Trimble 5700 GPS survey grade unit.

## Basis of Bearing:

The Basis of Bearing is GPS Measured.

## GLO Bearing:

The Bearings indicated are per the recorded plat obtained from the U.S. Land Office.

## Basis of Elevation:

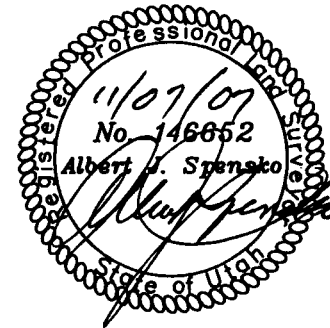
Basis of Elevation of 5459' being at the Southeast Section Corner of Section 34, Township 14 South, Range 10 East, Salt Lake Base and Meridian, as shown on the Price Quadrangle 7.5 minute series map.

## Description of Location:

Proposed Drill Hole located in the SE/4 NW/4 of Section 28, T14S, R10E, S.L.B.&M., being South 2332.01' from North Line and East 2007.12' from West Line of Section 28, T14S, R10E, Salt Lake Base & Meridian.

## Surveyor's Certificate:

I, Albert J. Spensko, a Registered Professional Land Surveyor, holding Certificate 146652 State of Utah, do hereby certify that the information on this drawing is a true and accurate survey based on data of record and was conducted under my personal direction and supervision as shown hereon.



## GRAPHIC SCALE



( IN FEET )

1 inch = 1000 ft.



## TALON RESOURCES, INC.

615 North 400 East P.O. Box 1230

Huntington, Utah 84528

Phone (435)687-5310 Fax (435)687-5311

E-Mail talon@etv.net

## ConocoPhillips

## ConocoPhillips Company

WELL CASSIA #28-862

Section 28, T14S, R10E, S.L.B.&M.

Carbon County, Utah

Drawn By: N. BUTKOVICH	Checked By: L.W.J./A.J.S.
Drawing No. A-1	Date: 10/30/07
	Scale: 1" = 1000'
Sheet 1 of 4	Job No. 3156

EXHIBIT "D"  
DRILLING PROGRAM

Attached to Form 3  
ConocoPhillips Company  
Cassia 28-862  
2332.01 FNL & 2007.12 FWL  
SENW of 28-14S-10E  
Carbon County, Utah

1. The Surface Geologic Formation

Mancos Shale

2. Estimated Tops of Important Geologic Markers

Blue Gate Shale Top      905

3. Projected Gas & H2O zones (Ferron Formation)

Coals and sandstones    1020-1600

No groundwater is expected to be encountered.

Casing & cementing will be done to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable mineral deposits.

All indications of usable water will be reported.

Surface casing will be tested to 500 psi and Production casing tested to 1500 psi with a minimum of 1 psi/ft of the last casing string depth

4. The Proposed Casing and Cementing Programs

Hole Size	Casing Size	Wt/Ft	Grade	Joint	Depth set
17 1/2"	13 3/8"	40.5	H-40	ST&C	0-60
11	8 5/8"	24#	J55	ST&C	0-400'
7 7/8"	5 1/2"	15.5#	M80	LT&C	0-1600'

The following shall be entered in the driller's log:

- 1) Blowout preventer pressure tests, including test pressures and results;
- 2) Blowout preventer tests for proper functioning;
- 3) Blowout prevention drills conducted;
- 4) Casing run, including size, grade, weight, and depth set;
- 5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- 6) Waiting on cement time for each casing string;
- 7) Casing pressure tests after cementing, including test pressures and results.

5. The Operator's Minimum Specifications for Pressure Control

Exhibit "G" is a schematic diagram of the blowout preventer equipment. A double gate 3000 psi BOPE will be used with a rotating head. This equipment will be tested to required pressures. All tests will be recorded in a Driller's Report Book. Physical operation of BOP's will be checked on each trip.

6. The Type and Characteristics of the Proposed Circulating Muds

0-400	11" hole	Drill with air, will mud-up if necessary.
400-TD	7 7/8 hole	Drill with air, will mud-up if necessary. 400 psi @ 1400-1600 cfm

7. The Testing, Logging and Coring Programs are as followed

400-TD      Gamma Ray, Neutron Porosity, CBL

Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is about 1256 psi max., however due to offset production pressures may be much lower. No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

8. Anticipated Starting Date and Duration of the Operations.

The well will be drilled around October 1, 2007

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

- (a) prior to beginning construction;
- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.



## SURFACE USE PLAN

Attached to Form 3  
ConocoPhillips Company  
Cassia 28-862  
2332.01 FNL & 2007.12 FWL  
SENW of 28-14S-10E  
Carbon County, Utah

### **1. Existing Roads**

- a. We do not plan to change, alter or improve upon any existing state or county roads.
- b. Existing roads will be maintained in the same or better condition. See Exhibit "B".

### **2. Planned Access**

Approximately 1300' of new access is required (Refer to Drawing L-1)

- a. Maximum Width: 24' travel surface with 27' base
- b. Maximum grade: 7%
- c. Turnouts: None
- d. Drainage design: 1 culverts may be required. Water will be diverted around well pad as necessary.
- e. If the well is productive, the road will be surfaced and maintained as necessary to prevent soil erosion and accommodate year-round traffic.
- f. Pipe and power lines will follow the proposed access road.

### **3. Location of Existing Wells**

- a. Refer to Drawing L-1.

### **4. Location of Existing and/or Proposed Facilities**

- a. If the well is a producer, installation of production facilities will be as shown on Exhibit "H". Buried powerlines run along access on the east and north, gathering lines on the south or west.
- b. Rehabilitation of all pad areas not used for production facilities will be made in accordance with landowner stipulations.

## **5. Location and Type of Water Supply**

- a. Water to be used for drilling will be purchased from the Price River Water Improvement District (a local source of municipal water) (tel. 435-637-6350).
- b. Water will be transported by truck over approved access roads.
- c. No water well is to be drilled for this location.

## **6. Source of Construction Materials**

- a. Any necessary construction materials needed will be obtained locally and hauled to the location on existing roads.
- b. No construction or surfacing materials will be taken from Federal/Indian land.

## **7. Methods for handling waste disposal**

- a. As the well will be air drilled, a small reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will not be lined unless conditions encountered during construction warrant it or if deemed necessary by the DOGM representative during the pre-site inspection. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operation cease with woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.
- b. Following drilling, the liquid waste will be evaporated from the pit and the pit back-filled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event fluids are produced, any oil will be retained in tankage until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- c. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

## **8. Ancillary Facilities**

- a. We anticipate no need for ancillary facilities with the exception of one trailer to be located on the drill site.

## **9. Wellsite Layout**

- a. Available topsoil will be removed from the location and stockpiled. Location of mud tanks, reserve and berm pits, and soil stockpiles will be located as shown on the attachments.
- b. A blooie pit will be located 100' from the drill hole. A line will be placed on the surface from the center hole to the pit. The pit will not be lined, but will be fenced on four sides to protect livestock/wildlife.
- c. Access to the well pad will be as shown on Drawing A-2 and L-1.
- d. Natural runoff will be diverted around the well pad.

## **10. Plans for Restoration of Surface**

- a. All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.

## **11. Surface Ownership:**

- a. The wellsite and access road will be constructed on lands owned by Burke H. Scholer as President of Cassia Grazing Association Inc. The operator shall contact the landowner representative and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities

**12. Other Information:**

- a. The primary surface use is farming and grazing. The nearest dwelling is approximately ½ mile north.
- b. Nearest live water is the Price River located approximately 1 mile east.
- c. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed and piled downhill from the topsoil stockpile location.
- d. The backslope and foreslope will be constructed no steeper than 4:1.
- e. All equipment and vehicles will be confined to the access road and well pad.
- f. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations, shall be on the wellsite during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

## **Cementing Program**

The 9 5/8" surface casing will be set with approximately 185 sacks Class G or Type V cement with 2% CC + ¼ pps D130 mixed at 15.8 ppg (yield = 1.16 ft<sup>3</sup>/sx). The cement will be circulated back to surface with 100% excess.

The 5 ½" production casing will be set and cemented using a single stage cementing process .

Cement Program: Pump 285 sxs 50/50 Poz Class G + 2% gel + .1% defoamer + .2% uniflac + .2% dispersant + .125 pps cellophane flakes mixed at 14.1 ppg.

The above cement volumes are approximate and are calculated under the assumption that a gauge hole will be achieved. If the cement does not return to surface, a cement bond log will be run to determine the top of cement. In the case where the cement is below the surface casing shoe, the casing will be perforated and squeeze cemented to the surface. If the cement is above the surface casing shoe, cement will be one-inched to the surface.

### 13. Company Representative

Jean Semborski  
Construction/Asset Integrity Supervisor  
ConocoPhillips Company  
P.O. Box 851  
6825 South 5300 West  
Price, Utah 84501  
(435) 613-9777  
(435) 820-9807

#### Mail Approved A.P.D. To:

Donna Williams  
Sr. Regulatory Analyst  
ConocoPhillips Company  
P.O. Box 51810  
Midland, Texas 79710

#### Excavation Contractor

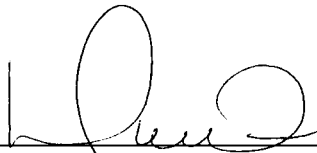
Larry Jensen, Vice President  
Nelco Contractors Inc.  
(435) 637-3495  
(435) 636-5268

### 14. Certification

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by ConocoPhillips Company and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9/10/07

Date

  
\_\_\_\_\_  
Donna Williams  
Sr. Regulatory Analyst  
ConocoPhillips Company

## AFFIDAVIT CONCERNING SURFACE USE AGREEMENT

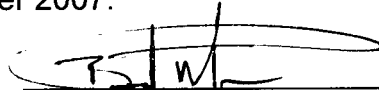
STATE OF COLORADO     }  
                                     }  
COUNTY OF DENVER     }

**Brandon W. Treese**, being first duly sworn upon his oath, deposes and says:

1. I am an Agent in the Property Tax, Real Estate, Right of Way and Claims Organization of ConocoPhillips Company, a Delaware corporation duly authorized to transact business in the State of Utah, ("COPC") and am authorized to execute this Affidavit on behalf of said corporation.
2. **Burke H. Scholer, as President of Cassia Grazing Association, Inc.**, whose address is 2350 W. Hubbard Road, Kuna, Idaho 83634, ("**Surface Owner**") owns the surface estate of property located in the **Southeast one quarter of the Northwest one quarter of Section 28, Township 14 South, Range 10 East, S.L.B.&M. Carbon County, Utah** ("Property").
3. COPC owns or operates oil and gas rights, including mineral leases, and may become holder of other oil and gas rights, including mineral leases, underlying and in the vicinity of the Property ("Leases") and desires to enter on the Property for the purposes of conducting oil and gas operations related to such oil and gas rights, including mineral leases.
4. The Surface Owner executed a Surface Use and Damage Agreement effective as of the 22<sup>nd</sup> Day of August 2007 which covers the Property. In addition to other agreements and as required by the State of Utah Division of Oil, Gas and Mining, Oil and Gas Conservation General Rules, R649-3-34 ("Well Site Restoration Rules"), the Surface Use and Damage Agreement sets forth the agreement between the parties for the protection of surface resources, reclamation of the Property and well site restoration, or damages in lieu thereof, for the surface pad location for COPC's **28-862 well** and associated infrastructure, which will be located on the Property. A Memorandum of Surface Use and Damage Agreement is being filed in the public records of Carbon County, Utah.
5. I execute and record this affidavit in accordance with the requirements of the Well Site Restoration Rules.

6. The matters stated herein are true of my own knowledge, except to any matters stated herein upon information and belief, and, as to those matters, I believe them to be true.

DATED this 7th day of September 2007.



**BRANDON W. TREESE**  
ConocoPhillips Company  
Property Tax, Real Estate,  
Right of Way and Claims  
Agent

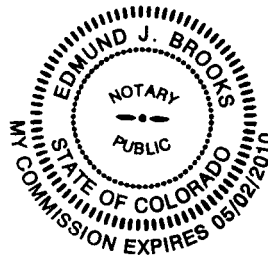
Subscribed, sworn and acknowledged to and by Brandon W. Treeese before me this 7th day of September 2007.



**NOTARY PUBLIC**  
For the State of Colorado

My Commission Expires:

5-2-2010





STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 4A

Bond No. 6196922

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That we (operator name) CONOCOPHILLIPS COMPANY as Principal,  
and

(surety name) SAFECO INSURANCE COMPANY OF AMERICA as Surety, duly authorized  
and qualified to do business in the State of Utah, are held and firmly bound unto the State of Utah in the sum of:

EIGHTY THOUSAND AND NO/100\*\*\*\*\* dollars (\$ 80,000.00 )  
lawful money of the United States, payable to the Director of the Division of Oil, Gas and Mining, as agent of the State of Utah, for the use and  
benefit of the State of Utah for the faithful payment of which we bind ourselves, our heirs, executors, administrators and successors, jointly and  
severally by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS the Principal is or will be engaged in the drilling, redrilling, deepening,  
repairing, operating, and plugging and abandonment of a well or wells and restoring the well site or sites in the State of Utah for the purposes of  
oil or gas production and/or the injection and disposal of fluids in connection therewith for the following described land or well:

☒ Blanket Bond: To cover all wells drilled in the State of Utah

☐ Individual Bond: Well No: \_\_\_\_\_  
Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_  
County: \_\_\_\_\_, Utah

NOW, THEREFORE, if the above bounden Principal shall comply with all the provisions of the laws of the State of Utah and the rules, orders and  
requirements of the Board of Oil, Gas and Mining of the State of Utah, including, but not limited to the proper plugging and abandonment of wells  
and well site restoration, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

IN TESTIMONY WHEREOF, said Principal has hereunto subscribed its name and has caused this instrument to be signed by its duly authorized  
officers and its corporate or notary seal to be affixed this

30th day of Dec, 20 02.

(Corporate or Notary Seal here)

By

Principal (company name)

Name (print)

Title

Manager

James F. Hughes

Signature

Attestes:

Date:

12-30-02

IN TESTIMONY WHEREOF, said Surety has caused this instrument to be signed by its duly authorized officers and its corporate or notary seal  
to be affixed this

1ST day of JANUARY, 20 03.

(Corporate or Notary Seal here)

By

Surety Company (Attach Power of Attorney)

Name (print)

Title

Jina Marie S

Signature

Attestes:

Date:

12/20/2002

CAROLYN E. WHEELER

NOTARY PUBLIC

MY COMMISSION EXPIRES: NOVEMBER 1, 2006

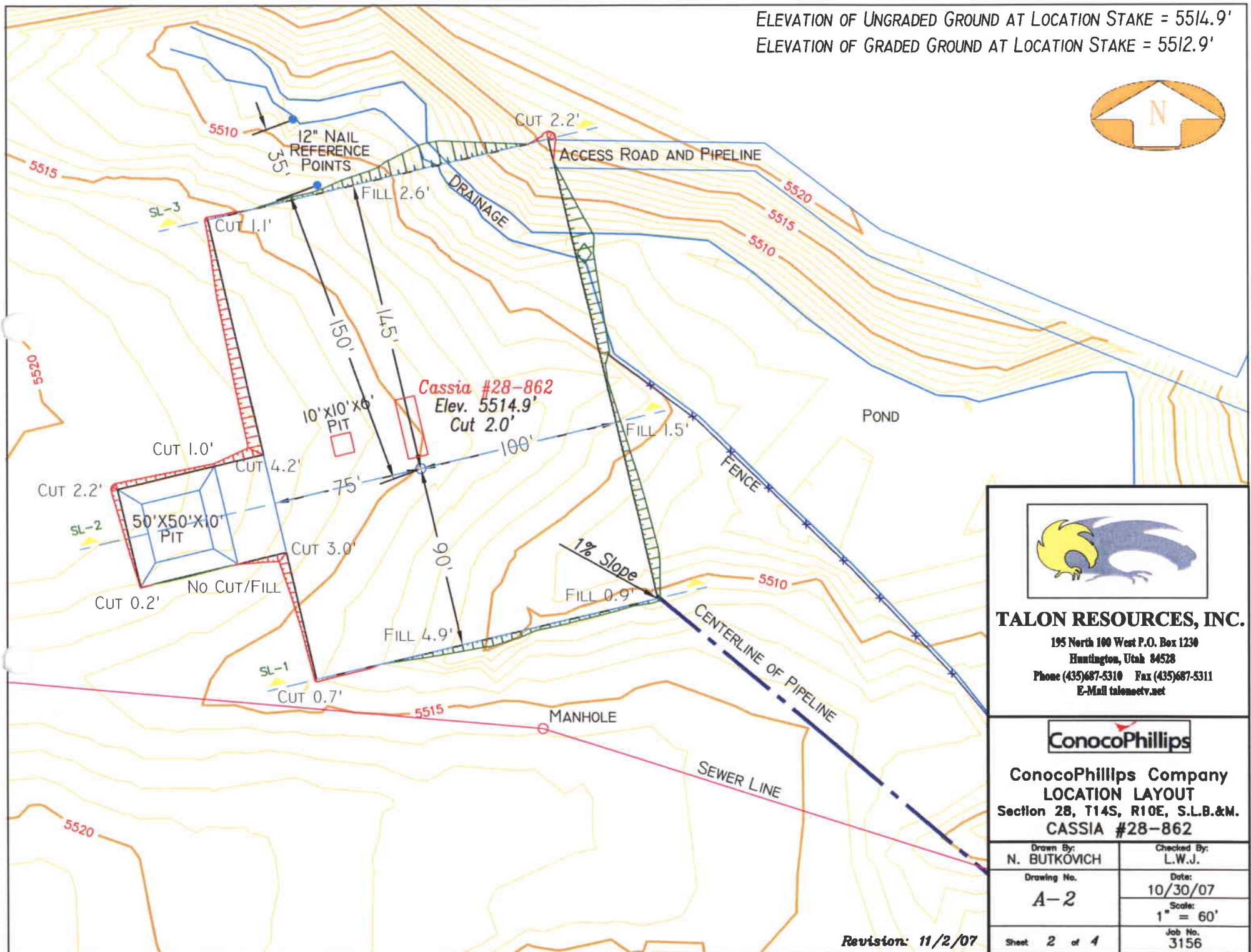
(5/2002)

City

State

Zip

ELEVATION OF UNGRADED GROUND AT LOCATION STAKE = 5514.9'  
 ELEVATION OF GRADED GROUND AT LOCATION STAKE = 5512.9'



## TALON RESOURCES, INC.

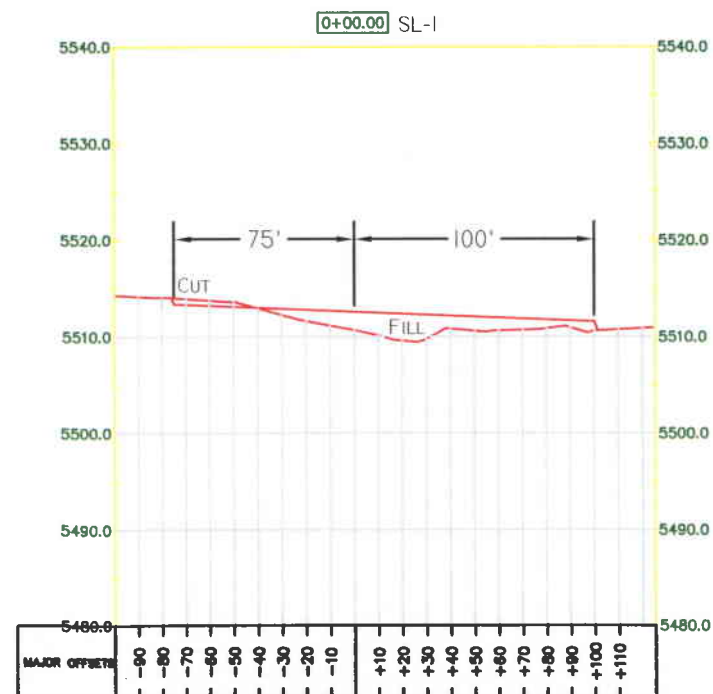
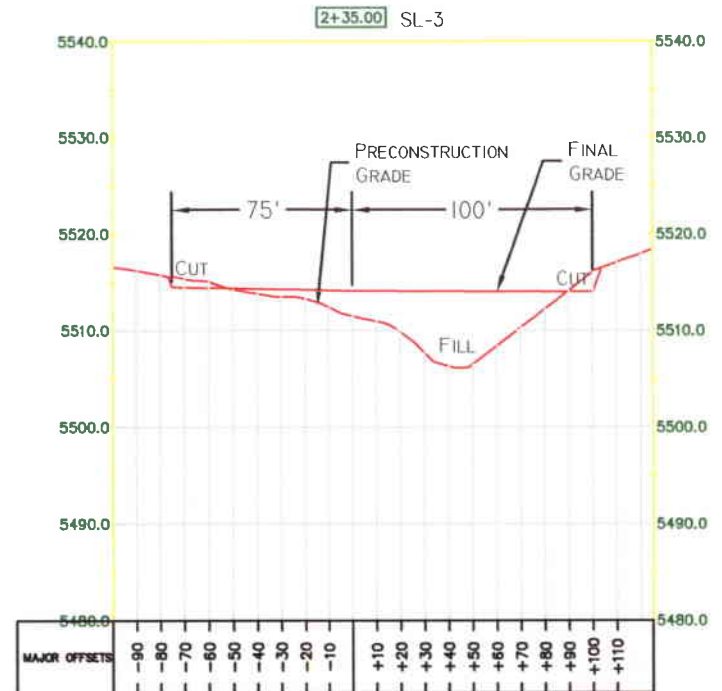
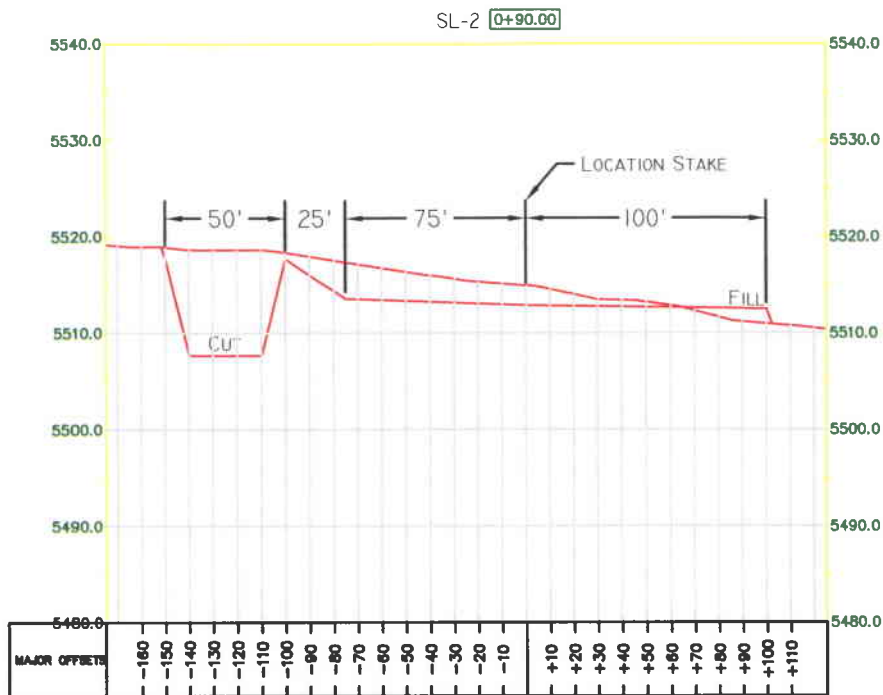
195 North 100 West P.O. Box 1230  
 Huntington, Utah 84528  
 Phone (435)687-5310 Fax (435)687-5311  
 E-Mail talonactv.net



**ConocoPhillips Company**  
**LOCATION LAYOUT**  
 Section 28, T14S, R10E, S.L.B.&M.  
 CASSIA #28-862

Drawn By: N. BUTKOVICH	Checked By: L.W.J.
Drawing No. A-2	Date: 10/30/07
	Scale: 1" = 60'
Sheet 2 of 4	Job No. 3156

Revision: 11/2/07



SLOPE = 1 1/2 : 1  
(EXCEPT PIT)  
PIT SLOPE = 1 : 1

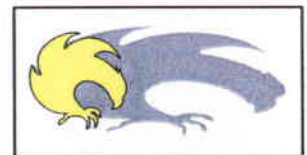
1"=10'  
X-Section  
Scale  
1"=40'

#### APPROXIMATE YARDAGES

(6") TOPSOIL STRIPPING = 810 CU. YDS.

TOTAL CUT (INCLUDING PIT) = 2,425 CU. YDS.

TOTAL FILL = 2,300 CU. YDS.



#### TALON RESOURCES, INC.

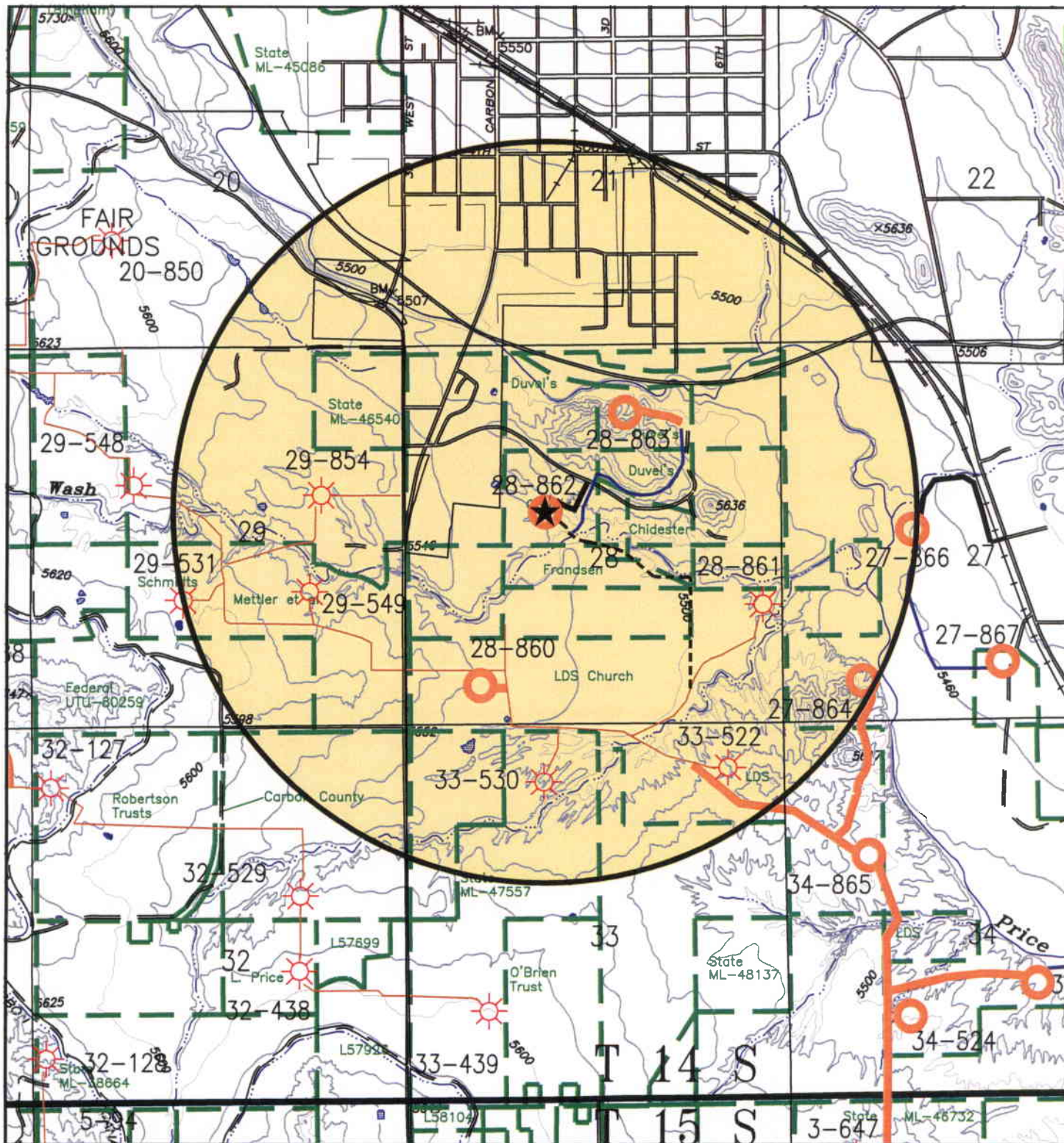
195 North 100 West P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talonectv.net



ConocoPhillips Company  
TYPICAL CROSS SECTION  
Section 28, T14S, R10E, S.L.B.&M.  
CASSIA #28-862

Drawn By: N. BUTKOVICH	Checked By: L.W.J.
Drawing No. C-1	Date: 10/30/07
	Scale: 1" = 80'
Sheet 3 of 4	Job No. 3156





### LEGEND

Proposed Well Location:  
 Other Proposed Well Locations:  
 Proposed Powerline:  
 Proposed Pipeline:  
 Proposed Roads:  
 Lease Boundary:  
 Existing Wells:



Scale: 1" = 2000'

October 30, 2007

### ConocoPhillips Company

6825 South 5300 West  
 P.O. Box 851  
 Price, Utah 84501  
 Phone: (435) 613-9777  
 Fax: (435) 613-9782



**WELL CASSIA #28-862**  
**Section 28, T14S, R10E, S.L.B.&M.**  
**Drawing L-1 4 of 4**



508000m E. 510000m E. 512000m E. 514000m E. 516000m E. 518000m E. 520000m E. NAD27 Zone 12S 525000m E.

ConocoPhillips Company

CASSIA #28-862

UTM NAD 27

N-4380928

E-516484

Talon Resources, Inc.

615 N. 400 E., P.O. BOX 1230

Huntington, Utah 84528

(435) 687-5310

TN  
124°

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles  
0 1 2 3 4 5 km

Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)





Cassia 28-862

©2007 Google™

Pointer 39°34'46.41" N 110°48'31.86" W elev 5519 ft Streaming ||||| 100%

Eye alt 7335 ft





Cassia 28-862

© 2007 Europa Technologies  
Image © 2007 DigitalGlobe  
Image © 2007 TerraMetrics

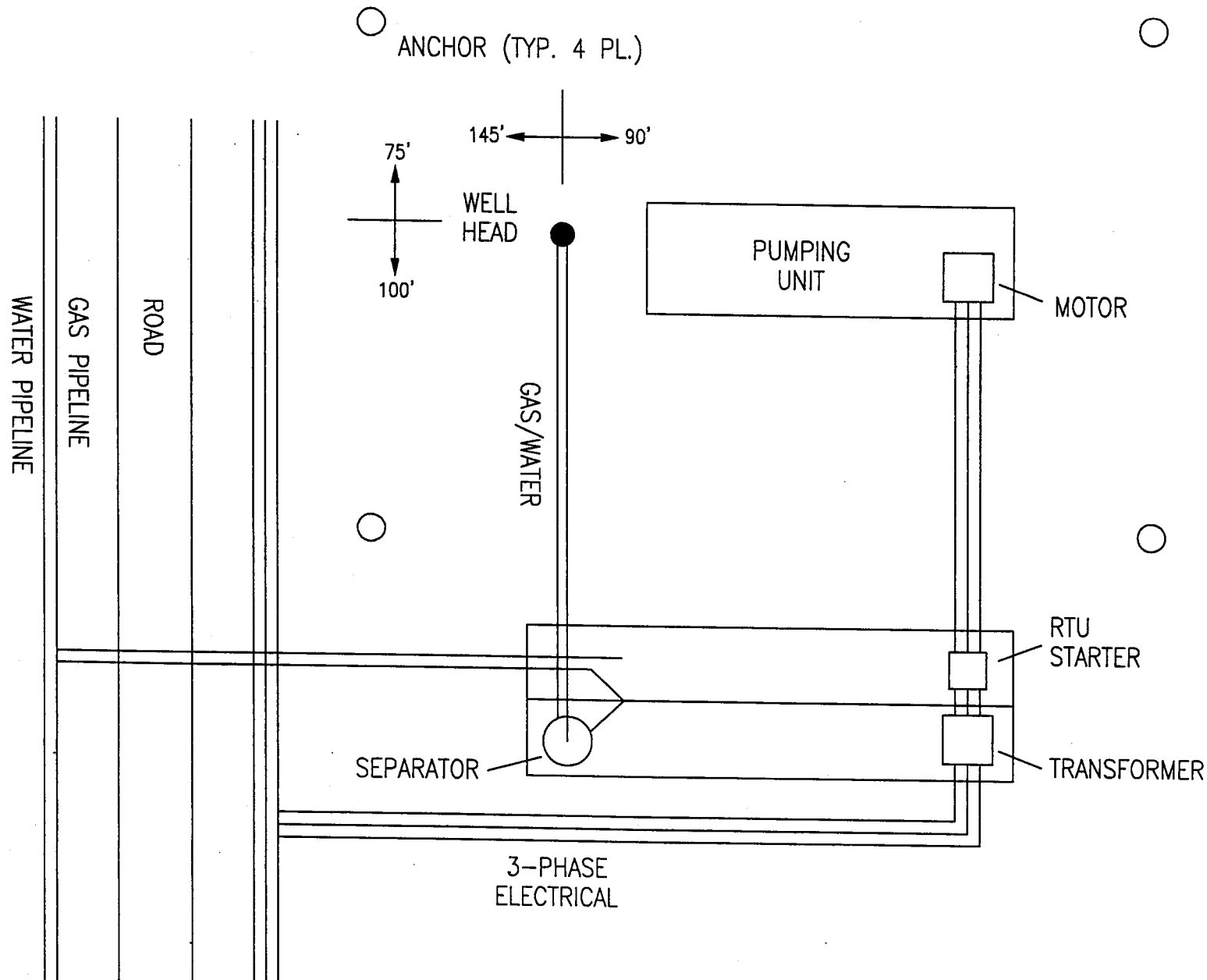
© 2007 Google™

Pointer 39°34'47.43" N 110°48'31.91" W elev 5514 ft Streaming 100%

Eye alt 5782 ft

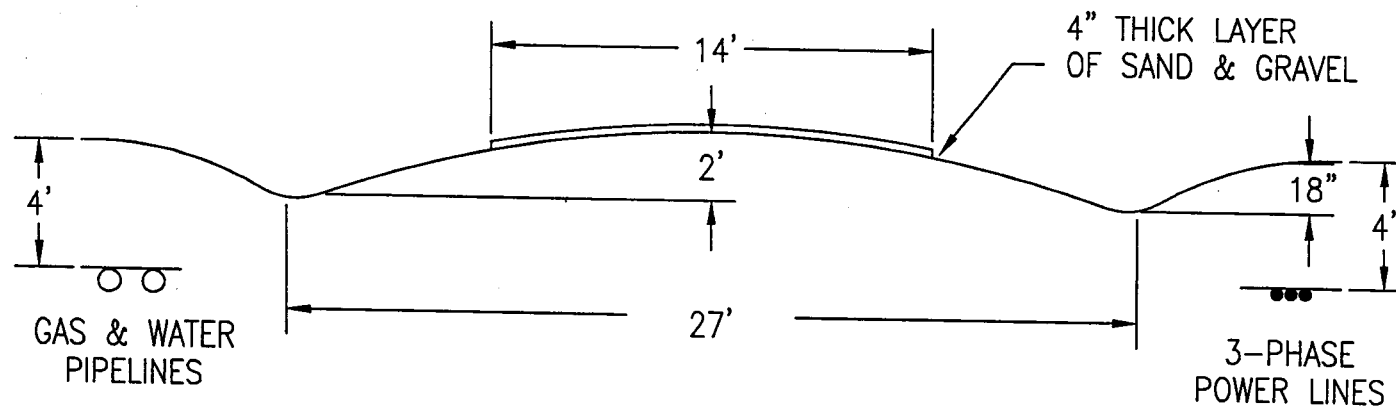
# CONOCOPHILLIPS COMPANY

WELL SITE LAYOUT (235' x 175')

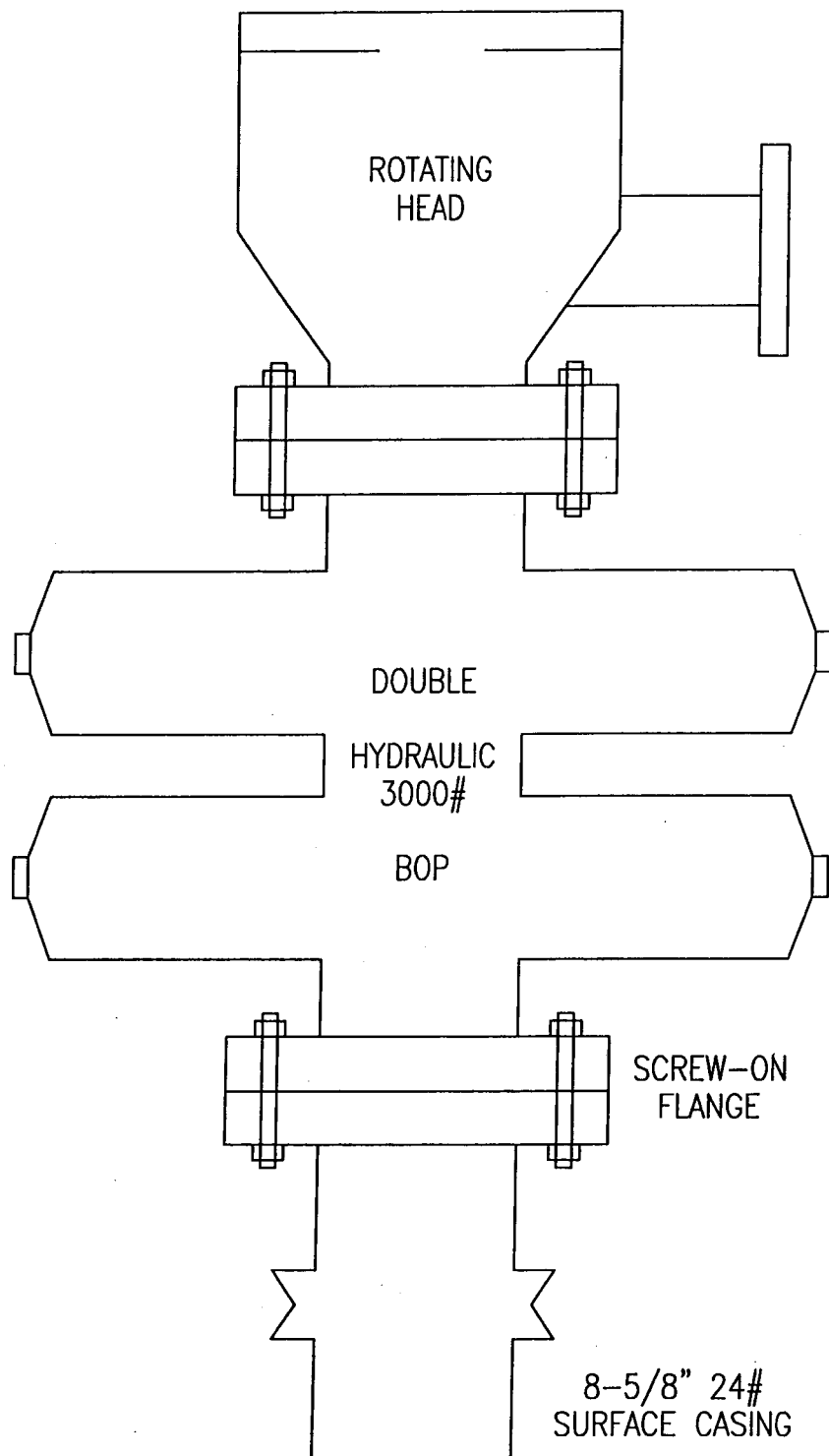




TYPICAL ROAD CROSS-SECTION  
CONOCOPHILLIPS COMPANY



DIVERTER HEAD  
CONOCOPHILLIPS COMPANY

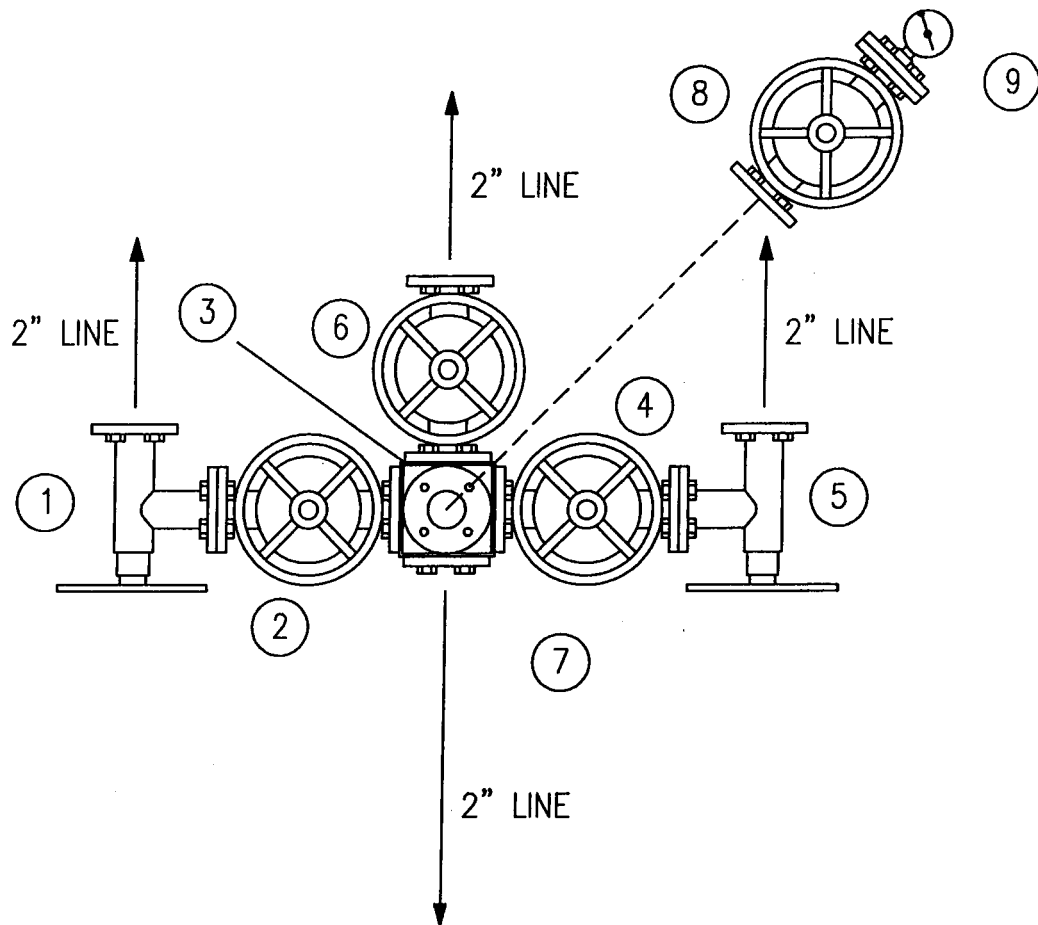


# CONOCOPHILLIPS COMPANY

- (1) 2" 5M FLANGED CHOKE
- (2) 2" 5M GATE VALVE (FLANGED)
- (3) 2" 5M STUDDED CROSS
- (4) 2" 5M GATE VALVE (FLANGED)
- (5) 2" 5M FLANGED CHOKE
- (6) 2" 5M GATE VALVE (FLANGED)
- (7) 2" LINE
- (8) 2" 5M GATE VALVE (FLANGED)
- (9) 3000# GAUGE

NOTE:

NUMBER 8 GATE VALVE SITS ON TOP OF MANIFOLD BETWEEN STUDDED CROSS AND 3000# GAUGE.



TO BOP  
AND A NEW 2" BALL VALVE  
FULL OPEN 5000 PSI

MANIFOLD

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/13/2007

API NO. ASSIGNED: 43-007-31330

WELL NAME: CASSIA 28-862

OPERATOR: CONOCOPHILLIPS COMPANY ( N2335 )

CONTACT: DONNA WILLIAMS

PHONE NUMBER: 432-688-6943

PROPOSED LOCATION:

SENW 28 140S 100E

SURFACE: 2332 FNL 2007 FWL

BOTTOM: 2332 FNL 2007 FWL

COUNTY: CARBON

LATITUDE: 39.57980 LONGITUDE: -110.8080

UTM SURF EASTINGS: 516487 NORTHINGS: 4380930

FIELD NAME: DRUNKARDS WASH ( 48 )

INSPECT LOCATN BY: / /

**Tech Review**

**Initials**

**Date**

Engineering

DRD

12/5/07

Geology

Surface

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

SURFACE OWNER: 4 - Fee

PROPOSED FORMATION: FRSD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 6196922 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. PRRV )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.

Unit: \_\_\_\_\_

\_\_\_ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

☒ R649-3-3. Exception

\_\_\_ Drilling Unit

Board Cause No: \_\_\_\_\_

Eff Date: \_\_\_\_\_

Siting: \_\_\_\_\_

\_\_\_ R649-3-11. Directional Drill

COMMENTS:

Needs Preset (10-09-07)

STIPULATIONS:

1 Spacing Slip  
2 STATEMENT OF BASIS

T14S R10E

DUVEL 28-863

CASSIA 28-862

28

## DRUNKARDS WASH FIELD

CAUSE: 243-9 / 2-8-2005

LDS 28-861

LDS 28-860

KEACH 27-864

LDS 33-522

UTAH 33-530

## DRUNKARDS WASH UNIT

OPERATOR: CONOCOPHILLIPS CO (N2335)

SEC: 28 T.14S R. 10E

FIELD: DRUNKARDS WASH (48)

COUNTY: CARBON

SPACING: R649-3-3 / EXCEPTION LOCATION

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

### Wells Status

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



PREPARED BY: DIANA MASON  
DATE: 10-SEPTEMBER-2007

# Application for Permit to Drill

## Statement of Basis

11/28/2007

### Utah Division of Oil, Gas and Mining

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Ownr</b>	<b>CBM</b>			
551	43-007-31330-00-00		GW	P	No			
<b>Operator</b>	CONOCOPHILLIPS COMPANY		<b>Surface Owner-APD</b>					
<b>Well Name</b>	CASSIA 28-862	<b>Unit</b>						
<b>Field</b>	DRUNKARDS WASH	<b>Type of Work</b>						
<b>Location</b>	SENW 28 14S 10E S 2332 FNL 2007 FWL GPS Coord (UTM) 516487E 4380930N							

#### Geologic Statement of Basis

A silty, poorly permeable soil is developed on the Blue Gate Member of the Mancos Shale. No aquifers with high quality ground water are likely to be encountered. The proposed casing and cement program will adequately isolate any water-bearing strata. Two water rights have been filed on a single water well within a mile of the location (192' deep water well in the SWSW corner in adjacent Section 22, Township 14 South, Range 10 East). This shallow well is about ¼ mile northeast of the location.

Chris Kierst  
APD Evaluator

11/27/2007  
Date / Time

#### Surface Statement of Basis

The pit will need to be lined based on pit ranking criteria, this liner will need to be completely removed to prevent it from being exposed in year-to-year farming operations. Drainages, including field runoff will be diverted around the well-pad. Pad may become "boggy" due to a high water table and field irrigation, this may require pit tun or other material to help firm up and stabilize the well-pad. COPC will address this concern if it becomes a problem. A PRWID sewer line exists near the south boundary of this pad and along the access route for which Blue Stakes should be called for.

Mark Jones  
Onsite Evaluator

10/9/2007  
Date / Time

#### Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
Pits	The liner will be completely removed prior to pit reclamation.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** CONOCOPHILLIPS COMPANY  
**Well Name** CASSIA 28-862  
**API Number** 43-007-31330-0 **APD No** 551 **Field/Unit** DRUNKARDS WASH  
**Location:** 1/4,1/4 SENW **Sec** 28 **Tw** 14S **Rng** 10E 2332 FNL 2007 FWL  
**GPS Coord (UTM)** 516486 4380939 **Surface Owner**

### **Participants**

M. Jones (DOGM), J. Semborski, Brandon Trease (COPC), Gayla Williams (Carbon County). Landowner not present however the lessee Lyle Jones contacted DOGM with input relative to the current and future surface use of the property.

### **Regional/Local Setting & Topography**

Staked location is south of Price, Utah ~1 mile and east of Highway 10 ~.5 mile. North of Drunkards Wash ~400 feet. Location is staked in a producing alfalfa field next to a stock watering pond.

### **Surface Use Plan**

#### **Current Surface Use**

Agricultural

#### **New Road**

<b>Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.25	<b>Width</b> 175	<b>Length</b> 235	Onsite

**Ancillary Facilities** N

### **Waste Management Plan Adequate?**

### **Environmental Parameters**

#### **Affected Floodplains and/or Wetland Y**

next to a stock watering pond, pad will be in close proximity to pond at NE corner, road will access at this point.

#### **Flora / Fauna**

producing alfalfa field.

#### **Soil Type and Characteristics**

clay loam

**Erosion Issues** N

**Sedimentation Issues** N

#### **Site Stability Issues Y**

could be unstable due to high water table, this will need to be watched for during construction phase of the well.

#### **Drainage Diversion Required Y**

field drainage must be provided to not impact the farm nor the farming ops impact the well-pad.

#### **Berm Required? Y**

Drunkards Wash standards.

Erosion Sedimentation Control Required? N

Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? N    Cultural Resources? N

**Reserve Pit**

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	25 to 75	15
Distance to Surface Water (feet)	<100	20
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Mod permeability	10
Fluid Type	Air/mist	0
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations	<10	0
Presence Nearby Utility Conduits	Present	15
Final Score		65    1    Sensitivity Level

**Characteristics / Requirements**

Dugout Earthen pit (50x50x10) exterior to the pad will be constructed. It is recommended that this site be lined with a 12 mil minimum liner, and that the liner be completely removed prior to pit reclamation in order to prevent it from being exposed through year to year farming ops.

Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 12    Pit Underlayment Required? N

**Other Observations / Comments**

The landowner, Burke Scholor, was contacted by ConocoPhillips and visited with the of the property and COPC representatives regarding the location of the well-pad and access road. At the lessee's request, after finding out about the location of the center section line, the location was moved to a new spot, which an ammended form #3 was submitted ot the Division with the pertinent information. Carbon County representative Gayla Williams also visited the site and noted the current county stipulation of being @ least 650' away from a residential dwelling with the drill point, which the drill point is outside of the 650' radius of the nearest dwelling. The new location, after the move, needs to have a final approval from the landowner prior to construction activities beginning. At the lessee's request the reserve pit will need to be reclaimed ASAP upon completion of the well to allow farming operations to resume. The pit will need to be lined based on pit ranking criteria, this liner will need to be completely removed to prevent it from being exposed in year-to-year farming operations. The road will access the pad at the NE corner on the north side of the drainage and the pond, the drianage will be diverted under the road though a culvert. Drainages, including field runoff will be diverted around the well-pad.

Mark Jones  
Evaluator

10/9/2007  
Date / Time



# 2007-12 ConocoPhillips Casia 28-862

## Casing Schematic

BHP surf.  
 $0.052(400)8.3 = 172.64$

13-3/8"  
MW 8.3

8-5/8"  
MW 8.3  
Frac 19.3

Surface

15%  
18%

TOC @  
0.

TOC @  
0.

TOC @  
0.

Conductor  
60. MD

Mancos-Blue Gate Sh.

Surface  
400. MD

BHP  $0.052(1600)8.4 = 699 \text{ psi}$   
 anticipate 1256 psi

Gas  $0.12(1600) = 192$   
 $699 - 192 = 507 \text{ psi; MASP}$

BOPE 3M ✓

Burst 2950  
 70% 2065 psi

Max P @ surf. shoe  
 $0.22(1200) = 264$   
 $699 - 264 = 435 \text{ psi}$

Test to 400 psi ✓

5-1/2"  
MW 8.4

Production  
1600. MD

905' Blue Gate Shale

1020' Coals & Sandstones

✓ Adequate Dec 12/5/07

Well name:

**2007-12 ConocoPhillips Casia 28-862**Operator: **ConocoPhillips Company**

String type: Conductor

Project ID:

43-007-31330

Location: Carbon County

**Design parameters:****Collapse**Mud weight: 8.330 ppg  
Design is based on evacuated pipe.**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 66 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 150 ft

Cement top: Surface

**Burst**Max anticipated surface pressure: 19 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 26 psi

No backup mud specified.

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)Tension is based on air weight.  
Neutral point: 53 ft**Non-directional string.**

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	60	13.375	48.00	H-40	ST&C	60	60	12.59	52.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	26	740	28.501	26	1730	66.63	3	322	99.99 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MineralsPhone: 801-538-5357  
FAX: 801-359-3940Date: December 3, 2007  
Salt Lake City, Utah**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

**2007-12 ConocoPhillips Casia 28-862**Operator: **ConocoPhillips Company**String type: **Surface**

Project ID:

43-007-31330

Location: **Carbon County****Design parameters:****Collapse**

Mud weight: 8.330 ppg

Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No

Surface temperature: 65 °F

Bottom hole temperature: 71 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 150 ft

Cement top: Surface

**Burst**

Max anticipated surface

pressure: 352 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 400 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 350 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 1,600 ft

Next mud weight: 8.400 ppg

Next setting BHP: 698 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 400 ft

Injection pressure: 400 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	400	8.625	24.00	J-55	ST&C	400	400	7.972	143
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	173	1370	7.917	400	2950	7.38	10	244	25.42 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MineralsPhone: 801-538-5357  
FAX: 801-359-3940Date: December 3, 2007  
Salt Lake City, Utah**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>2007-12 ConocoPhillips Casia 28-862</b>	
Operator:	<b>ConocoPhillips Company</b>	Project ID:
String type:	Production	43-007-31330
Location:	Carbon County	

**Design parameters:**
**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 87 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 368 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 346 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 698 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on air weight.  
Neutral point: 1,397 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1600	5.5	15.50	M-80	LT&C	1600	1600	4.887	213.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	698	4990	7.147	698	7000	10.03	25	282	11.37 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: 801-538-5357  
FAX: 801-359-3940

Date: December 3, 2007  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

December 6, 2007

ConoccoPhillips Company  
P O Box 51810  
Midland, TX 79710

Re: Cassia 28-862 Well, 2332' FNL, 2007' FWL, SE NW, Sec. 28, T. 14 South, R. 10 East,  
Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-31330.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Carbon County Assessor

Operator: ConoccoPhillips Company  
Well Name & Number Cassia 28-862  
API Number: 43-007-31330  
Lease: FEE

Location: SE NW Sec. 28 T. 14 South R. 10 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0873 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

## DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

Name of Company: CONOCOPHILLIPS COMPANY

Well Name: CASSIA 28-862

Api No: 43-007-31330 Lease Type: FEE

Section 28 Township 14S Range 10E County CARBON

Drilling Contractor PENSE DRILLING RIG # 18

### **SPUDDED:**

Date 12/21/07

Time 1:00 PM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by MIKE JOHNSON

Telephone # (307) 851-5824

Date 12/21/07 Signed CHD



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: ConocoPhillips Company Operator Account Number: N 2335  
Address: P. O. Box 51810  
city Midland  
state TX zip 79710 Phone Number: (432) 688-6943

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4300731330	Cassia 28-862		SE	NW	28	14S	10E Carbon
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	16594	12/22/2007			1/17/08	
Comments: <u>FRSD</u>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Donna Williams

Name (Please Print)

Signature

Sr. Regulatory Specialist

Title

1/2/2008

Date

**RECEIVED**

JAN 02 2008

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
2. NAME OF OPERATOR: ConocoPhillips Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
3. ADDRESS OF OPERATOR: P. O. Box 51810 CITY Midland STATE TX ZIP 79710		7. UNIT or CA AGREEMENT NAME: NA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2332.01' FNL & 2007.12' FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 28 14S 10E		8. WELL NAME and NUMBER: Cassia 28-862
		9. API NUMBER: 4300731330
		10. FIELD AND POOL, OR WILDCAT: Drunkards Wash
		COUNTY: Carbon
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 12/22/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: Spud Well
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

12/22/2007 - Spud 15" hole, drill to 57.3'. Set 13 3/8" conductor csg at 57.3'.  
12/30/2007 - Drilled 11" hole from 57.3' to 473'.  
12/31/2007 - Set 8 5/8", 24#, J-55 surface csg at 431', cement w/185 sks CI G cement, circ 14 bbls cement to surface.

NAME (PLEASE PRINT) Donna Williams TITLE Sr. Regulatory Specialist  
SIGNATURE DATE 1/2/2008

(This space for State use only)

RECEIVED

JAN 07 2008

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
ConocoPhillips Company

3. ADDRESS OF OPERATOR:  
P. O. Box 51810 CITY Midland STATE TX ZIP 79710

PHONE NUMBER:  
(432) 688-6943

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 2332.01' FNL & 2007.12' FWL

COUNTY: Carbon

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 28 14S 10E

STATE: UTAH

5. LEASE DESIGNATION AND SERIAL NUMBER:

Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

NA

7. UNIT or CA AGREEMENT NAME:

NA

8. WELL NAME and NUMBER:

Cassia 28-862

9. API NUMBER:

4300731330

10. FIELD AND POOL, OR WILDCAT:

Drunkards Wash

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 5/2/2008	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input checked="" type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Date of first production for the above referenced well is 5/2/2008: 0 BO, 0 BW, 1004 MCFD.

NAME (PLEASE PRINT)

Donna Williams

TITLE

Sr. Regulatory Specialist

SIGNATURE

DATE

5/6/2008

(This space for State use only)

RECEIVED

MAY 09 2008

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8  
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____						5. LEASE DESIGNATION AND SERIAL NUMBER: Fee			
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____						6. IF INDIAN, ALLOTTEE OR TRIBE NAME NA			
2. NAME OF OPERATOR: ConocoPhillips Company						7. UNIT or CA AGREEMENT NAME NA			
3. ADDRESS OF OPERATOR: P. O. Box 51810 CITY Midland STATE TX ZIP 79710						8. WELL NAME and NUMBER: Cassia 28-862			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2332.01' FNL & 2007.12' FWL  AT TOP PRODUCING INTERVAL REPORTED BELOW: _____  AT TOTAL DEPTH: _____						9. API NUMBER: 4300731330			
14. DATE SPUDDED: 12/22/2007						10. FIELD AND POOL, OR WILDCAT Drunkards Wash			
15. DATE T.D. REACHED: 1/8/2008						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 28 14S 10E			
16. DATE COMPLETED: 4/30/2008						12. COUNTY Carbon			
ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>						13. STATE UTAH			
18. TOTAL DEPTH: MD 1,505 TVD _____						17. ELEVATIONS (DF, RKB, RT, GL): 5514.9 GL			
19. PLUG BACK T.D.: MD 1,459 TVD _____						20. IF MULTIPLE COMPLETIONS, HOW MANY? *			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) DI/GL/GR, CD/CN/GR						21. DEPTH BRIDGE MD _____ TVD _____			
23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit copy)									
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
11	8 5/8 J55	24		431		CIG 185		Surf circ	None
7 7/8	5 1/2 M80	15.5		1,489		Poz G 300		Surf circ	None
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
26. PRODUCING INTERVALS									
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) Ferron	914	1,080			1,044 1,080		84	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)					948 972		102	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)					914 920		36	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.									
DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL								
1044-1080	Frac w/33 bbls 15% HCL, 1,500# 100 mesh sand, 86,000# 16/30 brown sand, 1,052 BW								
948-972	Frac w/40 bbls 15% HCL, 2,000# 100 mesh sand, 100,000# 16/30 brown sand, 1,257 BW								
914-920	Frac w/14 bbls 15% HCL, 1,000# 100 mesh sand, 40,000# 16/30 brown sand, 729 BW								
29. ENCLOSED ATTACHMENTS:								30. WELL STATUS:	
<input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION								Producing	
<input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS									
<input type="checkbox"/> DST REPORT <input type="checkbox"/> OTHER: _____									

(5/2000)

(CONTINUED ON BACK)

RECEIVED

MAY 15 2008

DIV. OF OIL, GAS & MINING

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED: 5/2/2008		TEST DATE: 5/2/2008		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,004	WATER – BBL: 0	PROD. METHOD: Flowing
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,004	WATER – BBL: 0	INTERVAL STATUS: Open

## INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Sold

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Bluegate	736
				Ferron	877
				Ferron Coal	915
				Tununk	1,188

## 35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT)

Donna Williams

TITLE Sr. Regulatory Specialist

SIGNATURE

DATE 5/6/2008

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation

- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940